

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0109878

Owner: City of St. Joseph  
Address: 11<sup>th</sup> & Fredrick, St. Joseph, MO 64501

Continuing Authority: Same as above  
Address: Same as above

Facility Name: St. Joseph Sanitary Landfill  
Address: 9431 50<sup>th</sup> Road SE, St. Joseph, MO 64507

Legal Description: SW ¼, NE ¼, Sec. 13, T56N, R35W, Buchanan County

Receiving Stream: Unnamed Tributary to Pigeon Creek (U)  
First Classified Stream and ID: Pigeon Creek (C)(00349)  
USGS Basin & Sub-watershed No.: (10240012-130001)

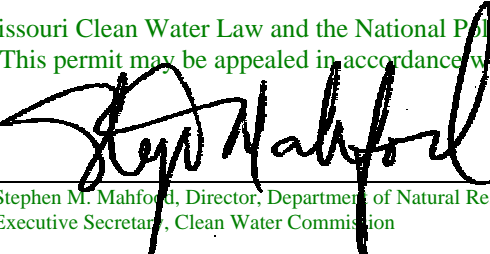
is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

**FACILITY DESCRIPTION**

Outfalls #001, #002 & #003 - Landfill - SIC #4953  
Sedimentation basin.  
All flows are dependent upon precipitation.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

March 21, 2003  
Effective Date

  
Stephen M. Mahford, Director, Department of Natural Resources  
Executive Secretary, Clean Water Commission

March 20, 2008  
Expiration Date  
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 2 of 5	
					PERMIT NUMBER MO-0109878	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001, #002 &amp; #003</u>						
Flow	MGD	*		*	once/quarter	instantaneous estimate
Rainfall	inches	*		*	daily measurement	***
BETX	mg/L	0.75		0.75	once/quarter**	grab
Biochemical Oxygen Demand <sub>5</sub>	mg/L	60		45	once/quarter**	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	80		60	once/quarter**	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab
Conductivity (Specific Conductance)	micromhos /cm 25°C	*		*	once/quarter**	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab
Iron, Total Recoverable	mg/L	*		*	once/quarter**	grab
pH - Units	SU	****		****	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>July 28, 2003</u> .						
<u>Outfalls #001, #002 &amp; #003</u>						
Ammonia as N	mg/L	*****		*****	once/year*****	grab
Calcium	mg/L	*		*	once/year*****	grab
Fluoride	µg/L	*		*	once/year*****	grab
Total Hardness	µg/L	*		*	once/year*****	grab
Barium, Total Recoverable	µg/L	*		*	once/year*****	grab
Boron, Total Recoverable	µg/L	*		*	once/year*****	grab
Cadmium, Total Recoverable	µg/L	*		*	once/year*****	grab
Chromium, Total Recoverable	µg/L	*		*	once/year*****	grab
Cobalt, Total Recoverable	µg/L	*		*	once/year*****	grab
Copper, Total Recoverable	µg/L	*		*	once/year*****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2003</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 5	
					PERMIT NUMBER MO-0109878	
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<u>Outfalls #001, #002 &amp; #003</u>						
Sodium, Total Recoverable	mg/L	*		*	once/year*****	grab
Mercury, Total Recoverable	mg/L	*		*	once/year*****	grab
Arsenic, Total Recoverable	µg/L	*		*	once/year*****	grab
Lead, Total Recoverable	µg/L	*		*	once/year*****	grab
Selenium, Total Recoverable	µg/L	*		*	once/year*****	grab
Silver, Total Recoverable	µg/L	*		*	once/year*****	grab
Manganese, Total Recoverable	µg/L	*		*	once/year*****	grab
Magnesium, Total Recoverable	µg/L	*		*	once/year*****	grab
Zinc, Total Recoverable	µg/L	*		*	once/year*****	grab
Nitrate & Nitrite as N	mg/L	*		*	once/year*****	grab
Phosphorus, Total Recoverable	mg/L	*		*	once/year*****	grab
Antimony, Total Recoverable	µg/L	*		*	once/year*****	grab
Beryllium, Total Recoverable	µg/L	*		*	once/year*****	grab
Nickel, Total Recoverable	µg/L	*		*	once/year*****	grab
Thallium, Total Recoverable	µg/L	*		*	once/year*****	grab
Vanadium, Total Recoverable	µg/L	*		*	once/year*****	grab
Sulfate	mg/L	*		*	once/year*****	grab
Total Organic Carbon	mg/L	*		*	once/year*****	grab
Oil & Grease	mg/L	15		10	once/year*****	grab
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MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per quarter in the months of March, May, September & November.
- \*\*\* Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- \*\*\*\*\* The discharge shall not exceed the appropriate values in Table B 10 CSR 20,7.031.
- \*\*\*\*\* Samples to be taken in September.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.

3. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
    - (4) The level established in Part A of the permit by the Director.
  - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
4. Report as no-discharge when a discharge does not occur during the report period.
  5. All design and operating specifications and all Solid Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and shall apply throughout the life of this permit without regard to other conditions. Permits, occurrences, etc.
  6. This permit does not allow the discharge of stormwater that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the Solid Waste Disposal Area Operating Permit, Report of Approval Plans and Specifications (with conditions).
  7. All discharges shall comply with the Missouri Water Quality Standards, 10 CSR 20-7.031, Section (3)(C), which states "waters shall be free from substance in sufficient amounts to cause unsightly color or turbidity...", and Section (4)(G), which states "water contaminants shall not cause or contribute to turbidity of color that will cause substantial visible contact with the natural appearance of the stream...".

C. SPECIAL CONDITIONS (continued)

8. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (e) There shall be no significant human health hazard from incidental contact with the water;
  - (f) There shall be no acute toxicity to livestock or wildlife watering;
  - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
9. All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.
10. If any of the sampling results from any of the outfalls show any violation of the permit discharge limitations, written notification shall be made to the Department of Natural Resources within five (5) days of notification of analytical results. Notification shall indicate the date(s) of sample collection, the analytical results, and permit number, and shall include a statement concerning the revisions or modifications in management practices that are being implemented to address the violation of the limitations that occurred.

After a violation has been reported, a sample of stormwater runoff resulting from the next rainfall greater than 0.1 inches shall be collected at outfall(s) for which the violation occurred. Analytical results of this sample shall be submitted in writing to the Department of Natural Resources (this paragraph supercedes Part I, Section B: e. A. Noncompliance Notification).